

WHAT IS CLAIMED IS:

1. Device for detection of the location of an edge (2) of a transparent, anisotropic material (3,3') comprising at least one sensor (1) with a light source (4), two polarization filters (6,7) with transmission axes (8,9) meeting at a 90° angle as well as a light detector (10), whereby the light source (4) and one polarization filter (6) are located on one side of the edge (2) to be detected and the second polarization filter (7) and the light detector (10) are located on the other side and whereby at least one of the sensors (1) can be arranged and/or configured so that various angles (32) between the transmission axis (8) of the first polarization filter (6) and the optical axis (14) of the transparent, anisotropic material (3,3') are possible.

2. Device according to Claim 1, characterized in that an angle (32) is selected in which a turn of the light (5) emitted from the first polarization filter (6) passes through the material (3,3') to be detected to a sufficient extent that it can detect an edge (2).

3. Device according to Claim 2, characterized in that an angle (32) is selected in which one of the best possible images of the edge (2) on the light detector (10) is possible.

4. Device according to Claim 3, characterized in that the transmission axis (8) of the first polarization filter (6) to the optical axis (14) of the transparent material (3,3') forms an angle in the 25° to 65° range.

5. Device according to one of the Claims 1 to 4, characterized in that two defined angle positions (12', 12'') have been used and the angle position (12', 12'') in which the edge (2) is better shown is selected for the respective material (3, 3').

6. Device according to Claim 5, characterized in that a plurality of defined angle positions (12', 12'') have been used and the angle

position (12', 12'') in which the edge (2) is better shown is selected for the respective material (3, 3').

7. Device according to Claim 5 or 6, characterized in that that a drive (13) is used that places the one sensor (1) in the optimal position (11, 11', 11'', ...).

8. Device according to one of the Claims 2 to 7, characterized in that a control (15) is used that is connected to the light detector (10) and that the angle position (12', 12'') for showing the edge (2) is selected on the light detector (10).

9. Device according to one of the Claims 1 to 8, characterized in that a control (15) is used that adjusts the intensity of the light source (4).

10. Device according to one of the Claims 1 to 9, characterized in that a control (15) is used that adjusts the responsivity of the light detector.

11. Device according to one of the Claims 5 to 10, characterized in that the control (15) has been programmed with set points for defined angle positions (12', 12'').

12. Device according to one of the Claims 1 to 11, characterized in that the light detector (10) is constructed of several receiving components.

13. Device according to one of the Claims 1 to 11, characterized in that the light detector (10) is configured as a flat receiver.

14. Device according to one of the Claims 1 to 11, characterized in that the light detector (10) comprises a row of receiving components.

15. Web edge control (16) with a device according to the Claims 1 to 14, a control (15) and a web edge control (18), characterized in that at least one of the sensors (1) faces the edge (2) of a transparent, anisotropic web (3')

to be detected is configured or arranged so that all possible courses of the optical axes (14) due to a change of the optical axis (14) of the/a web (3') can be taken.

16. Printing press with a transparent, anisotropic web (3') for conveying the printing substrate, characterized by a web edge control (16) according to Claim 15.

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